

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: HOM ET AL. Examiner: UNKNOWN
Serial No.: 09/816,876 Group Art Unit: 1645
Filed: MARCH 23, 2001 Docket: 13615.1USU2
Title: METHODS TO TREAT ALZHEIMER'S DISEASE

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence and the paper(s), as described herein, are being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on July 19, 2001.

By: Angel Olson

Commissioner for Patents
Washington, D.C. 20231

Sir:

We are transmitting herewith the attached:

- ☒ Transmittal Sheet in duplicate containing Certificate of Mailing
- ☒ Information Disclosure Statement, Form 1449, 104 References
- ☒ Return postcard

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725. A duplicate of this sheet is enclosed.

MERCHANT & GOULD P.C.
P.O. Box 2903, Minneapolis, MN 55402-0903
612.332.5300



By: Matthew A. Doscotch
Name: Matthew A. Doscotch
Reg. No.: P-48,957
MAD:pli



S/N 09/816,876

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	HOM ET AL.	Examiner:	UNKNOWN
Serial No.:	09/816,876	Group Art Unit:	1645-
Filed:	MARCH 23, 2001	Docket No.:	13615.1USU2
Title:	METHODS TO TREAT ALZHEIMER'S DISEASE		

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described herein, are being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on July 27, 2001.

By: Angel Olson

INFORMATION DISCLOSURE STATEMENT (37 C.F.R. §1.97(b))

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted before the mailing date of a first Office Action on-the-merits. Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

In accordance with 37 C.F.R. §1.98(a)(2), a copy of each document or other information listed on the enclosed Form 1449 is provided.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

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Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Please charge any additional fees or credit any overpayment to Deposit Account No. 13-2725.

Respectfully submitted,
MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903
612.371.5271

Date: July 19, 2001



By: Matthew A. Doscotch
Name: Matthew A. Doscotch
Reg. No. P-48,957
MAD:pll

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FORM 1349 INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 13615.1USU2	Application Number: 09/816,876
	Applicant: HOM ET AL.	
	Filing Date: 03/23/2001	Group Art Unit: 1645

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,224,179	09/23/1980	Schneider			
	4,231,877	11/04/1980	Yamauchi et al.			
	4,235,871	11/25/1980	Papahadjopoulos et al.			
	4,247,411	01/27/1981	Vanlerberghe et al.			
	4,394,448	07/19/1983	Szoka, Jr. et al.			
	4,399,216	08/16/1983	Axel et al.			
	4,668,770	05/26/1987	Boger et al.			
	4,673,567	06/16/1987	Jizomoto			
	4,676,980	06/30/1987	Segal et al.			
	4,736,866	04/12/1988	Leder et al.			
	4,753,788	06/28/1988	Gamble			
	4,814,270	03/21/1989	Piran			
	4,816,567	03/28/1989	Cabilly et al.			
	4,870,009	09/26/1989	Evans et al.			
	4,880,781	11/14/1989	Hester, Jr. et al.			
	4,897,355	01/30/1990	Eppstein et al.			
	5,010,182	04/23/1991	Brake et al.			
	5,145,684	09/08/1992	Liversidge et al.			
	5,162,538	11/10/1992	Voges et al.			
	5,250,565	10/05/1993	Brooks et al.			
	5,364,934	11/15/1994	Drayna et al.			
	5,374,652	12/20/1994	Buzzetti et al.			
	5,376,542	12/27/1994	Schlegal			
	5,475,138	12/12/1995	Pal et al.			
	5,602,169	02/11/1997	Hewawasam et al.			
	5,602,175	02/11/1997	Talley et al.			
	5,625,031	04/29/1997	Webster et al.			
	5,631,405	05/20/1997	Pal et al.			

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

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FORM 1449 INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 13615.1USU2	Application Number: 09/816,876
	Applicant: HOM ET AL.	
	Filing Date: 03/23/2001	Group Art Unit: 1643

	5,663,200	09/02/1997	Bold et al.			
	5,708,004	01/13/1998	Talley et al.			
	5,733,882	03/31/1998	Carr et al.			
	5,760,076	06/02/1998	Vazquez et al.			
	5,807,891	09/15/1998	Bold et al.			
	5,831,117	11/03/1998	Ng et al.			
	5,849,911	12/15/1998	Fassler et al.			
	5,922,770	07/13/1999	Peschke et al.			
	5,935,976	08/10/1999	Bold et al.			
	6,013,658	01/11/2000	Lau et al.			
	6,045,829	04/04/2000	Liversidge et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	3 610 593 A1	10/01/1987	DE with English abstract				
	3 721 855 A1	09/22/1988	DE with English abstract				
	4 003 575 A1	08/08/1991	DE with English abstract				
	0 036 776 A2	09/30/1981	EP				
	0 073 657 A1	03/09/1983	EP				
	0 117 058 A2	08/29/1984	EP				
	0 117 060 A2	08/29/1984	EP				
	0 173 441 A1	05/03/1986	EP				
	0 209 897 A2	01/28/1987	EP				
	0 212 903 B1	03/04/1987	EP				
	0 264 106 B1	04/20/1988	EP				
	0 274 259 B1	07/13/1988	EP				
	0 320 205 A1	06/14/1989	EP				
	0 337 714 A2	10/18/1989	EP				
	0 362 179 A2	04/04/1990	EP				
	0 372 537 A3	06/13/1990	EP with English abstract				

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FORM 1449 INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 13615.1USU2	Application Number: 09/816,876
	Applicant: HOM ET AL.	
	Filing Date: 03/23/2001	Group Art Unit: 1645

	0 437 729 A2	07/24/1991	EP with English abstract			
	0 609 625 A1	08/10/1994	EP			
	2 203740 A	10/26/1988	GB			
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	62-246546	10/27/1987	JP with English abstract			
	7-126286	05/16/1995	JP with English abstract			
	WO 87/02986	05/21/1987	PCT			
	WO 87/04349	07/30/1987	PCT			
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	WO 89/00161	01/12/1989	PCT			
	WO 89/01488	02/23/1989	PCT			
	WO 89/05859	06/29/1989	PCT			
	WO 90/13646	11/15/1990	PCT with English abstract			
	WO 91/00360	01/10/1991	PCT			
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	WO 92/20373	11/26/1992	PCT			
	WO 93/02057	02/04/1993	PCT			
	WO 93/08829	05/13/1993	PCT			
	WO 93/17003	09/02/1993	PCT			
	WO 97/30072	08/21/1997	PCT			
	WO 98/29401	07/09/1998	PCT			
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	WO 98/50342	11/12/1998	PCT			
	WO 99/41266	08/19/1999	PCT			
	WO 99/54293	10/28/1999	PCT with English abstract			
	WO 01/10387 A2	02/15/2001	PCT			

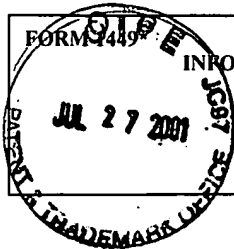
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Arrowsmith, R.J. et al., "Amino-Alcohol Dipeptide Analogues: A Simple synthesis of a Versatile Isostere fro the evelopment of Proteinase Inhibitors", <i>Tetrahedron Letters</i> , Vol. 28, No. 45, pp. 5569 - 5572 (1987)
	Askin, D. et al., "Highly Diastereoselective Alkylations of Chiral Amide Enolates: New Routes to Hydroxyethylene Dipeptide Isostere Inhibitors of HIV-1 Protease", <i>J. Org. Chem.</i> , Vol.57, No. 10, pp. 2771 - 2773 (May 8, 1992)

EXAMINER	DATE CONSIDERED
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INFORMATION DISCLOSURE STATEMENT

IN AN APPLICATION

(Use several sheets if necessary)

Docket Number:

13615.1USU2

Application Number:

09/816,876

Applicant: HOM ET AL.

Filing Date: 03/23/2001

Group Art Unit: 1645

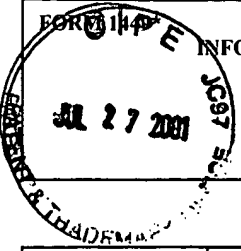
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	Diederich, A. et al., "Stereoselective Synthesis of a Hydroxyethylene Dipeptide Isostere", <i>Tetrahedron Letters</i> , Vol. 34, No. 39, pp. 6169 - 6172 (September 24, 1993)
	Dragovich, P. et al., "Structure-Based Design, Synthesis, and Biological Evaluation of Irreversible Human Rhinovirus 3C Protease Inhibitors. 3. Structure—Activity Studies of Ketomethylene-Containing Peptidomimetics", <i>J. Med. Chem.</i> , Vol. 42, No. 7, pp. 1203 - 1212 (April 8, 1999)
	Ghosh, A. et al., "Design of Potent Inhibitors for Human Brain Memapsin 2 (β -Secretase)", <i>J. Am. Chem. Soc.</i> , Vol. 122, No. 14, pp. 3522 - 3523 (April 12, 2000)
	Gould, P., "Salt selection for basic drugs", <i>International Journal of Pharmaceutics</i> , Vol. 33, Nos. 1 -3, pp. 201 - 217 (November 1986)
	Greene, T. et al., "Protective Groups in Organic Synthesis", Second Edition, <i>John Wiley & Sons, Inc.</i> , Ch. 7, Protection for the Amino Group: Cabamates, pp. 327 - 335 (1991).
	Henning, R., "A. Synthetic Routes to Different Classes of Natural Products and Analogs Thereof", <i>Organic Synthesis Highlights II</i> , Edited by Herbert Waldmann, VCH Publishers, New York, NY, pp. 251 - 259 (1995)
	Hon, Y-S et al., "The Studies of Metal Ion Catalyzed Carbon-Hydrogen Insertion of α - Alkoxy- α' - Diazoketones Derived from Mandelic and Lactic Acids", <i>Heterocycles</i> , Vol. 31, No. 10, pp. 1745 - 1750 (1990)
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	Kaldor, S. et al., "Isophthalic Acid Derivatives: Amino Acid Surrogates for the Inhibition of HIV-1 Protease", <i>Bioorganic & Medicinal Chemistry Letters</i> , Vol. 5, No. 7, pp. 721 - 726 (April 6, 1995)
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	Martin, S. et al., "Application of AlMe ₃ -Mediated Amidation Reactions to Solution Phase Peptide Synthesis", <i>Tetrahedron Letters</i> , Vol. 39, pp. 1517 - 1520 (1998)
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	Sabbagh, M. et al., " β -Amyloid and Treatment Opportunities for Alzheimer's Disease", <i>Alzheimer's Disease Review</i> 3, pp. 1 - 19 (1997)
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	Sakurai, M. et al., "Studies of HIV-1 Protease Inhibitors. II. Incorporation of Four Types of Hydroxyethylene Dipeptide Isosteres at the Scissile Site of Substrate Sequences", <i>Chem. Pharm. Bull.</i> , Vol. 41, No. 8., pp. 1378 - 1386 (1993)
	Selkoe, D., "Translating cell biology into therapeutic advances in Alzheimer's disease", <i>Nature</i> , Supplement to Vol. 399, No. 6733, pp. A23 - A31 (June 24, 1999)
	Shibata, N. et al., "An Expedient Synthesis of (2R,3S)- 3- <i>tert</i> -Butoxycarbonylamino-1-isobutylamino-4-phenyl-2-butanol, a Key Building Block of HIV Protease Inhibitors", <i>Tetrahedron Letters</i> , Vol. 38, No. 4, pp. 619 - 620 (January 27, 1997)

EXAMINER

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 FORM 144 INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 13615.1USU2	Application Number: 09/816,876
	Applicant: HOM ET AL.	
	Filing Date: 03/23/2001	Group Art Unit: 1645

	Vazquez, M. et al., "Inhibitors of HIV-1-Protease Containing the Novel and Potent (R)-(Hydroxyethyl)sulfonamide Isostere", <i>Journal of Medicinal Chemistry</i> , Vol. 38, No. 4, pp. 581 - 584 (February 17, 1995)
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